

CLAIMS

What is claimed is:

1. A network of devices to filter synchronized data, the network of devices comprising:
 - a. a content server to store content;
 - b. a first network device; and
 - b. a middleware filter coupled to the first network device and to the content server such that during a data synchronization, content is received by the middleware filter from the content server according to the data synchronization and the middleware filter selectively sends the received content to the first network device.
2. The network of devices of claim 1 wherein the content sent by the content server includes meta data.
3. The network of devices of claim 2 wherein the meta data includes a data type of the content.
4. The network of devices of claim 3 wherein the middleware filter reads the meta data of the content received from the content server and sends the content to the first network device if the data type of the read meta data matches an authorized data type associated with the first network device.
5. The network of devices of claim 4 wherein the middleware filter stores the authorized data type of the first network device.
6. The network of devices of claim 2 wherein the meta data includes an authorized network device type.

7. The network of devices of claim 6 wherein the middleware filter reads the meta data of the content received from the content server and sends the content to the first network device if the authorized network device type of the read meta data matches a network device type associated with the first network device.
8. The network of devices of claim 7 wherein the middleware filter stores the network device type of the first network device.
9. The network of devices of claim 2 wherein the meta data is added to the content by the content server.
10. The network of devices of claim 2 wherein the meta data includes data synchronization information corresponding to the data synchronization.
11. The network of devices of claim 10 further comprising a display coupled to the middleware filter to display the data synchronization information.
12. The network of devices of claim 1 wherein the data synchronization is a one-way data synchronization.
13. The network of devices of claim 1 wherein the data synchronization is a bi-directional data synchronization.
14. The network of devices of claim 1 wherein the second network device comprises a personal computer.
15. The network of devices of claim 1 wherein the first network device comprises a personal digital assistant.
16. The network of devices of claim 1 wherein the content server comprises a web server.
17. The network of devices of claim 1 wherein the second network device comprises a server.

18. The network of devices of claim 1 further comprising a second network device coupled in between the content server and the first network device, wherein the second network device includes the middleware filter.
19. The network of devices of claim 1 wherein the content server includes the middleware filter.
20. A network of devices to filter synchronized data, the network of devices comprising:
 - a. a content server to store content;
 - b. a personal digital assistant; and
 - c. a personal computer coupled to the personal digital assistant and to the content server, wherein the personal computer includes a middleware filter such that during a data synchronization, content received by the personal computer from the content server according to the data synchronization is selectively sent to the personal digital assistant by the personal computer according to the middleware filter.
21. The network of devices of claim 20 wherein the content sent by the content server includes meta data.
22. The network of devices of claim 21 wherein the meta data includes a data type of the content.
23. The network of devices of claim 22 wherein the personal computer reads the meta data of the content received from the content server and sends the content to the personal digital assistant if the data type of the read meta data matches an authorized data type associated with the personal digital assistant.
24. The network of devices of claim 23 wherein the personal computer stores the authorized data type of the personal digital assistant.
25. The network of devices of claim 21 wherein the meta data includes an authorized network device type.

26. The network of devices of claim 25 wherein the personal computer reads the meta data of the content received from the content server and sends the content to the personal digital assistant if the authorized network device type of the read meta data matches a network device type associated with the personal digital assistant.
27. The network of devices of claim 26 wherein the personal computer stores the network device type of the personal digital assistant.
28. The network of devices of claim 21 wherein the meta data is added to the content by the content server.
29. The network of devices of claim 21 wherein the meta data includes data synchronization information corresponding to the data synchronization.
30. The network of devices of claim 29 wherein the personal computer displays the data synchronization information.
31. The network of devices of claim 20 wherein the data synchronization is a one-way data synchronization.
32. The network of devices of claim 20 wherein the data synchronization is a bi-directional data synchronization.
33. The network of devices of claim 20 wherein the content server comprises a web server.
34. A method of filtering synchronized data, the method comprising:
 - a. determining content to be sent from a content server to a first network device during a data synchronization;
 - b. sending the content from the content server to a second network device coupled between the content server and the first network device, wherein the second network device includes a middleware filter;
 - c. selectively filtering the content according to the middleware filter; and

- d. sending the filtered content from the second network device to the first network device.
- 35. The method of claim 34 wherein the content sent from the content server includes meta data.
- 36. The method of claim 35 wherein the meta data includes a data type of the content.
- 37. The method of claim 36 wherein selectively filtering the content includes reading the meta data of the content received from the content server by the middleware filter, matching the data type of the read meta data to an authorized data type associated with the first network device, and sending the content to the first network device if the data type of the read meta data matches the authorized data type associated with the first network device.
- 38. The method of claim 37 wherein the middleware filter stores the authorized data type of the first network device.
- 39. The method of claim 35 wherein the meta data includes an authorized network device type.
- 40. The method of claim 39 wherein selectively filtering the content includes reading the meta data of the content received from the content server by the middleware filter, matching the authorized network device type of the read meta data to a network device type associated with the first network device, and sending the content to the first network device if the authorized network device type of the read meta data matches the network device type associated with the first network device.
- 41. The method of claim 40 wherein the middleware filter stores the network device type of the first network device.
- 42. The method of claim 35 wherein the meta data is added to the content by the content server.

43. The method of claim 35 wherein the meta data includes data synchronization information corresponding to the data synchronization.
44. The method of claim 43 further comprising displaying the data synchronization information.
45. The method of claim 34 wherein the data synchronization is a one-way data synchronization.
46. The method of claim 47 wherein the data synchronization is a bi-directional data synchronization.
47. The method of claim 34 wherein the second network device comprises a personal computer.
48. The method of claim 34 wherein the first network device comprises a personal digital assistant.
49. The method of claim 34 wherein the content server comprises a web server.
50. The method of claim 34 wherein the second network device comprises a server.
51. A method of filtering synchronized data, the method comprising:
 - a. determining content to be sent from a content server to a first network device during a data synchronization, wherein the first network device includes a middleware filter;
 - b. selectively filtering the determined content according to the middleware filter; and
 - c. sending the filtered content from the content server to the first network device.
52. The method of claim 51 wherein the content sent from the content server includes meta data.

- 53. The method of claim 52 wherein the meta data includes a data type of the content.
- 54. The method of claim 53 wherein selectively filtering the determined content includes reading the meta data of the determined content by the middleware filter, matching the data type of the read meta data to an authorized data type associated with the first network device, and sending the determined content to the first network device if the data type of the read meta data matches the authorized data type associated with the first network device.
- 55. The method of claim 54 wherein the middleware filter stores the authorized data type of the first network device.
- 56. The method of claim 52 wherein the meta data includes an authorized network device type.
- 57. The method of claim 56 wherein selectively filtering the determined content includes reading the meta data of the determined content by the middleware filter, matching the authorized network device type of the read meta data to a network device type associated with the first network device, and sending the determined content to the first network device if the authorized network device type of the read meta data matches the network device type associated with the first network device.
- 58. The method of claim 57 wherein the middleware filter stores the network device type of the first network device.
- 59. The method of claim 52 wherein the meta data is added to the content by the content server.
- 60. The method of claim 52 wherein the meta data includes data synchronization information corresponding to the data synchronization.
- 61. The method of claim 60 further comprising displaying the data synchronization information.

62. The method of claim 51 wherein the data synchronization is a one-way data synchronization.
63. The method of claim 51 wherein the data synchronization is a bi-directional data synchronization.
64. The method of claim 51 wherein the first network device comprises a personal digital assistant.
65. The method of claim 51 wherein the content server comprises a web server.
66. An apparatus to filter synchronized data wherein the apparatus includes a middleware filter such that during a data synchronization, content is received by the apparatus from a content server according to the data synchronization, and the received content is selectively sent to a network device by the apparatus according to the middleware filter.
67. The apparatus of claim 66 wherein the content sent by the content server includes meta data.
68. The apparatus of claim 67 wherein the meta data includes a data type of the content.
69. The apparatus of claim 68 wherein the middleware filter reads the meta data of the content received from the content server and sends the content to the network device if the data type of the read meta data matches an authorized data type associated with the network device.
70. The apparatus of claim 69 wherein the middleware filter stores the authorized data type of the network device.
71. The apparatus of claim 67 wherein the meta data includes an authorized network device type.

- 72. The apparatus of claim 71 wherein the middleware filter reads the meta data of the content received from the content server and sends the content to the network device if the authorized network device type of the read meta data matches a network device type associated with the network device.
- 73. The apparatus of claim 72 wherein the middleware filter stores the network device type of the network device.
- 74. The apparatus of claim 67 wherein the meta data is added to the content by the content server.
- 75. The apparatus of claim 67 wherein the meta data includes data synchronization information corresponding to the data synchronization.
- 76. The apparatus of claim 75 further comprising a display to display the data synchronization information.
- 77. The apparatus of claim 66 wherein the data synchronization is a one-way data synchronization.
- 78. The apparatus of claim 66 wherein the data synchronization is a bi-directional data synchronization.
- 79. The apparatus of claim 66 wherein the apparatus comprises a personal computer.
- 80. The apparatus of claim 66 wherein the network device comprises a personal digital assistant.
- 81. The apparatus of claim 66 wherein the content server comprises a web server.
- 82. The apparatus of claim 66 wherein the apparatus comprises a server.

83. An apparatus for filtering synchronized data comprising:
- a. means for determining content to be sent from a content server to a first network device during a data synchronization;
 - b. means for sending the content from the content server to a second network device coupled between the content server and the first network device, wherein the second network device includes a middleware filter;
 - c. means for selectively filtering the content according to the middleware filter; and
 - d. means for sending the filtered content from the second network device to the first network device.